

S/N: 10/586,542

Page 6 of 8

REMARKS

Favorable reconsideration of this application is requested in view of the above amendments and the following remarks. The Examiner has acknowledged Applicants' election of Group I (Claims 1-2). Claim 1 has been amended to include the chemical formula requested by the Examiner. New claim 13 is supported, for example, at the bottom of page 6 of the specification. Claims 1-13 are pending in the Application and claims 3-12 have been withdrawn from further consideration.

Claim Objection

The Examiner objected to claim 1 because it did not include the chemical formula for Ramipril(I). Claim 1 has been amended to include the chemical formula for Ramipril(I). Withdrawal of the objection is respectfully requested.

Claim Rejection Under 35 USC § 103(a)

Claim 1 is rejected under 35 USC § 103(a) as being unpatentable over Wang et al. 6,407,262. Applicants respectfully traverse the rejection.

Claim 1 is directed to a process for purifying optically impure Ramipril to obtain Ramipril(1) having optical purity of at least 99.9% and comprises crystallizing optically impure Ramipril from an organic solvent selected from nitromethane, dimethoxymethane, diethoxymethane, and 2,2-dimethoxy propane and mixtures thereof." Wang fails to teach the use of any of these solvents.

Wang merely discloses that a wide variety of different categories of organic solvents including various nitriles, alcohols, aromatic hydrocarbons, ethers, esters, hydrocarbons and chlorinated solvents may be used in preparing Ramipril. See column 6 lines 12-25 of the reference. In example 1, Wang et al discloses diisopropyl ether to separate Ramiril (I) along with ethyl acetate for separation of Ramipril (1) from its diastereomer (2). Specifically, the solvent is a mixture of ethyl acetate and diisopropyl ether in the ratio 47:53 (volume/volume).

S/N: 10/586,542

Page 7 of 8

The remaining three examples 2, 3 and 4 describe use of either isopropyl acetate or butyl acetate alone for separation of compounds (1) and (2). Nothing in the Wang disclosure points one of ordinary skill to any of the solvents required by claim 1. At best, the reference disclosure suggests that no significant difference in performance would be expected when using a solvent selected from the various groups listed in the reference.

In contrast, the evidence of record shows that the selection of the specific solvents required by claim 1 has significant effects. As seen in Table I on page 7 of the present specification, the process of claim 1 produces Ramipril (I) in a form that has an improved bulk density. That is, Table I shows the comparison of the physical properties such as bulk density of Ramipril (I) obtained by the prior art methods and the method of the present invention. The prior art solvents listed in Table I are ethanol-diisopropyl ether and ethanol diethyl ether; based on the Wang disclosure, one of ordinary skill would expect these solvents to produce results at least as favorable as any other. However, the solvents of claim 1 (diethoxythmethane, 2,2-dimethoxypropane and nitromethane) each result in a form of Ramipril having a higher bulk density than that obtained with the solvents used in the prior art. High bulk density of an actively pharmaceutical compound facilitates compression of tablets and filling of capsules, improves flowability of powders, and reduces shipping volume. Wang does not provide any teachings suggesting that this result could be achieved.

With respect to claim 13, each of the examples in Wang requires an initial step of seeding with Ramipril. The reference does not suggest that Ramipril (I) with an optical purity of at least 99.9% could be obtained by crystallizing optically impure Ramipril from an organic solvent selected from nitromethane, dimethoxymethane, diethoxymethane, and 2,2, -dimethoxy propane and mixtures thereof, without the additional step of seeding with Ramipril.

Claim 2 is dependent on Claim 1. Applicants respectfully submit that claim 2 is patentable for at least the same reasons as Claim 1.

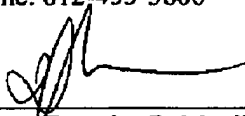
S/N: 10/586,542
Page 8 of 8

In view of the above, favorable reconsideration in the form of a Notice of Allowance is requested.

Respectfully submitted,

HAMRE, SCHUMANN,
MUELLER & LARSON, P.C.
P.O. Box 2902
Minneapolis, MN 55402-0902
Phone: 612-455-3800

Date: December 4, 2009

By 
Name: Douglas P. Mueller
Reg. No. 30,300
Customer No. 52835